

ABSTRACT

THE EFFECT OF SUBSTITUTION OF CASSIA LEAF SILAGE WITH PAKCHONG GRASS (*Pennisetum purpureum* cv Thailand) SILAGE ON THE PHYSICAL QUALITY OF ETAWAH'S BREED GOAT MILK

By

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This study aims to determine the effect of substitution of cassava leaf silage with pakchong grass silage (*Pennisetum Purpureum* cv Thailand) in rations on physical quality (pH value, acidity degree, and alcohol test) in Etawah Peranakan goat milk. This research was conducted from February to March 2022 and is located at Asyifa Farm, Yosomulyo Village, Central Metro District, Metro City. Goat milk analysis was carried out at the Livestock Production Laboratory, Department of Animal Husbandry, Faculty of Agriculture, University of Lampung. The research design used was a randomized block design (RBD) with 3 treatments and 3 replications, so there were 9 experimental units. The treatments given were P1 (70% concentrate + 30% cassava leaf silage), P2 (70% concentrate + 15% cassava leaf silage + 15% Pakchong grass silage), and P3 (70% concentrate + 30% Pakchong grass silage). The data obtained were analyzed using analysis of variance with a significant level of 5% and continued with Duncan's further test. The results showed that the rations P1, P2, and P3 had no significant effect ($P > 0.05$) on physical quality (pH value, degree of acidity, and alcohol test) in Etawah Peranakan goat's milk. Feeding the P3 treatment (70% concentrate + 30% Pakchong grass silage) yielded a pH value of 6.29. Feeding the P1 treatment (70% concentrate + 30% cassava leaf silage) gave the result of an acidity degree of 5.33 °SH. The rations in the P1, P2, and P3 treatments gave positive results on the alcohol test. Pakchong grass silage can replace cassava leaf silage based on physical quality (pH value, acidity degree, and alcohol test) in Etawah cross-breed goat milk.

Keywords : Alcohol Test, Cassava Leaves, Degree of Acidity, Milk of Etawah Peranakan Goats, Pakchong Grass, pH.

ABSTRAK

PENGARUH SUBSTITUSI SILASE DAUN SINGKONG DENGAN SILASE RUMPUT PAKCHONG (*Pennisetum purpureum cv Thailand*) TERHADAP KUALITAS SUSU KAMBING PERANAKAN ETAWAH

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Penelitian ini bertujuan untuk mengetahui pengaruh substitusi silase daun singkong dengan silase rumput pakchong (*Pennisetum Purpureum cv Thailand*) pada ransum terhadap kualitas fisik (nilai pH, derajat keasaman, dan uji alkohol) pada susu kambing Peranakan Etawah. Penelitian ini dilaksanakan pada Februari --Maret 2022 dan berlokasi di Asyifa Farm, Kelurahan Yosomulyo, Kecamatan Metro Pusat, Kota Metro. Analisis susu kambing dilakukan di Laboratorium Produksi Ternak, Jurusan Peternakan, Fakultas Pertanian, Universitas Lampung. Rancangan penelitian yang digunakan adalah Rancangan Acak Kelompok (RAK) dengan 3 perlakuan dan 3 ulangan, sehingga terdapat 9 satuan percobaan. Perlakuan yang diberikan yaitu P1(70% konsentrat + 30% silase daun Singkong), P2 (70% konsentrat + 15% silase daun Singkong + 15 % silase rumput Pakchong), dan P3 (70% konsentrat + 30% silase rumput Pakchong). Data yang diperoleh dianalisis menggunakan analisis varians dengan taraf nyata 5% dan dilanjutkan dengan uji lanjut Duncan. Hasil penelitian didapatkan perlakuan ransum P1, P2, dan P3 tidak berpengaruh nyata ($P>0,05$) terhadap kualitas fisik (nilai pH, derajat keasaman, dan uji alkohol) pada susu kambing Peranakan Etawah. Pemberian ransum pada perlakuan P3 (70% konsentrat + 30% silase rumput Pakchong) memberikan hasil nilai pH susu yaitu sebesar 6,29. Pemberian ransum pada perlakuan P1 (70% konsentrat + 30% silase daun Singkong) memberikan hasil derajat keasaman yaitu sebesar 5,33 °SH. Pemberian ransum pada perlakuan P1, P2, dan P3 memberikan hasil positif terhadap uji alkohol. Silase rumput Pakchong dapat menggantikan silase daun Singkong berdasarkan kualitas fisik (nilai pH, derajat keasaman, dan uji alkohol) pada susu kambing peranakan etawah.

Kata Kunci : Daun Singkong, Derajat Keasaman, pH, Rumput Pakchong, Susu Kambing Peranakan Etawah, Uji Alkohol.